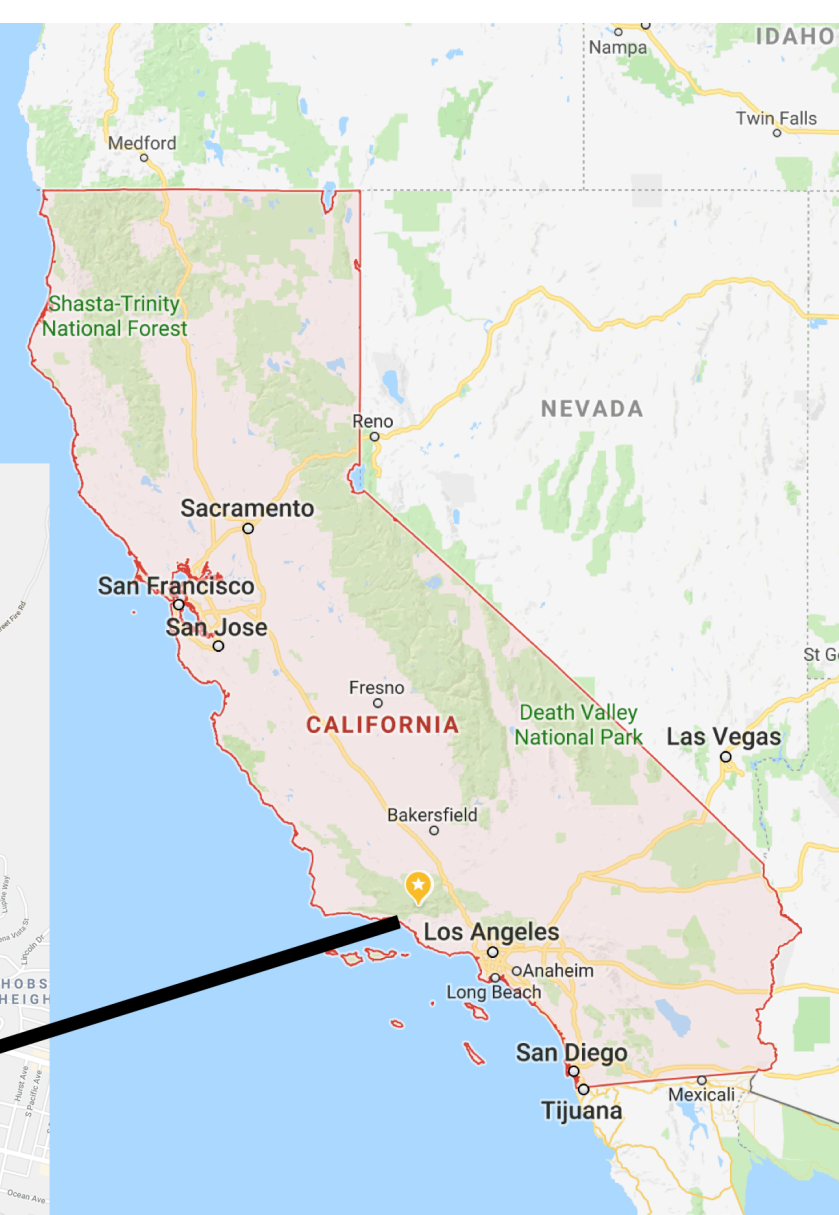
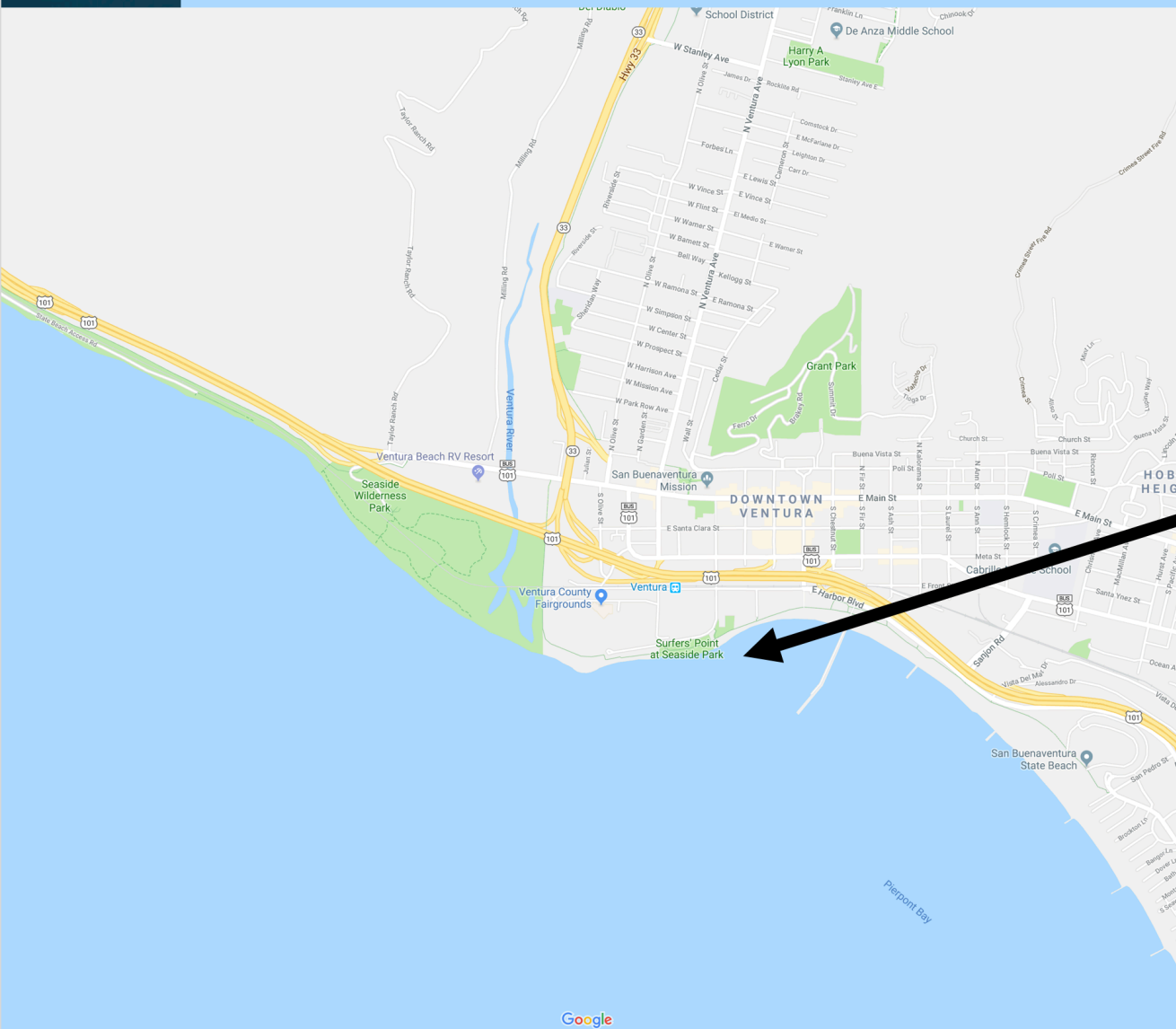


Surfers' Point, Ventura, CA





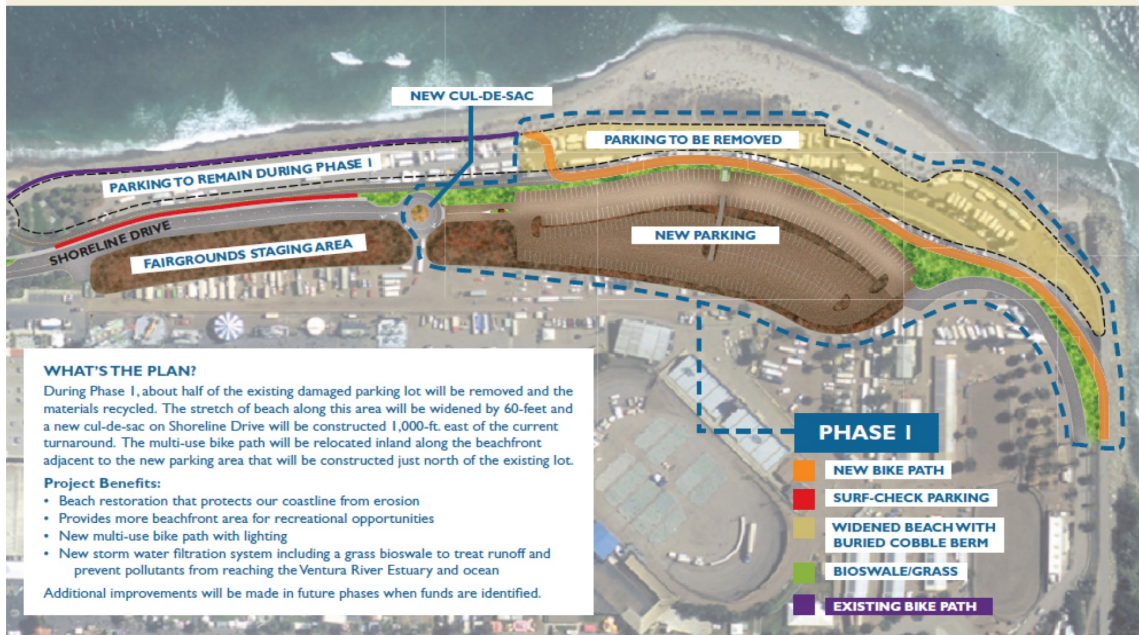
SURFERS' POINT | **ILLUSTRATIVE PLAN**



June 2005

rrm design group
creating environments people enjoy™

SURFERS' POINT MANAGED RETREAT PROJECT(PHASE I)



WHAT'S THE PLAN?

During Phase I, about half of the existing damaged parking lot will be removed and the materials recycled. The stretch of beach along this area will be widened by 60-feet and a new cul-de-sac on Shoreline Drive will be constructed 1,000-ft. east of the current turnaround. The multi-use bike path will be relocated inland along the beachfront adjacent to the new parking area that will be constructed just north of the existing lot.

Project Benefits:

- Beach restoration that protects our coastline from erosion
- Provides more beachfront area for recreational opportunities
- New multi-use bike path with lighting
- New storm water filtration system including a grass bioswale to treat runoff and prevent pollutants from reaching the Ventura River Estuary and ocean

Additional improvements will be made in future phases when funds are identified.

PARKING DURING CONSTRUCTION

Beachgoers will have access to the shore and bike path during construction. Ample parking will be available at the remaining portion of the existing parking area along the beachfront and paid parking at the Derby Club/Ventura County Fairgrounds parking area; 20 minute "surf-check" parking will be added along the south side of Shoreline Drive prior to construction.

Construction is scheduled to begin in September 2010 and is slated for completion in May 2011. Construction crews will be on site Monday-Friday from 7 am-5 pm. For more information visit www.cityofventura.net or call Mark Garcia at (805) 658-4789. Contractor: C.A. Rasmussen

BURIED COBBLE BERM



THE CITY OF VENTURA AND VENTURA COUNTY FAIRGROUNDS ARE PRESERVING OUR BEACH!

Ventura's beaches are a natural asset and vitally important to the overall economy and quality of life in our community. Beaches provide endless recreational opportunity and enjoyment for residents and visitors to Ventura each year.

SUSTAINABLE SOLUTION

To protect our beach from erosion, we are pursuing an environmentally friendly and economically viable option that will replicate the natural protective characteristics of the beach. While hard structures, like seawalls, are sometimes used to protect the shoreline, they inevitably lead to loss of sand and beach area. We have adopted a more sustainable solution by initiating a "managed retreat" approach. This process involves relocating the damaged bike path and parking lot. A buried cobble berm will be installed, mimicking what occurs naturally at the river mouth, which will stabilize the shore and help prevent future damage. Over 26,000 tons of imported cobblestone will be buried along the ocean's edge and will be covered with 18,000 tons of new sand that is compatible with the native beach sand.

COMMUNITY PARTNERSHIPS

Mitigating the erosion along the coastline is limited by strict environmental regulations. That is why we partnered with the California Coastal Conservancy, California State Parks, the State Coastal Commission, Surfrider Foundation and the Ventura County Bicycle Coalition to restore and protect our shoreline. It is because of these creative and collaborative partnerships that we secured an environmentally sensitive and innovative approach to protect our beach and preserve public access.

Funding Sources

\$1.5M Federal Transportation/Bikeway Grant
\$1.5M State Coastal Conservancy
\$350,000 City of Ventura Bond



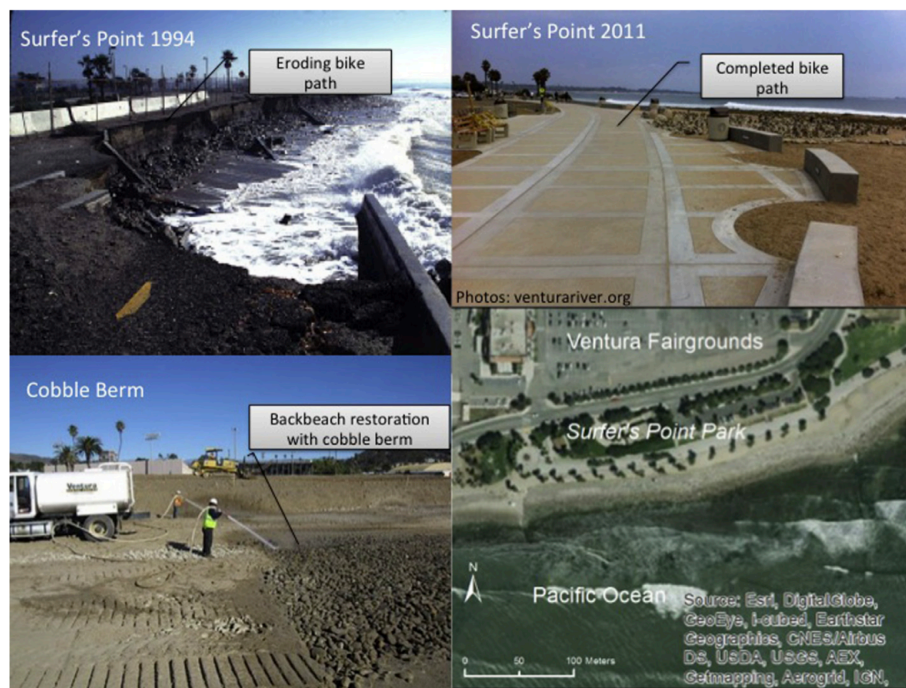
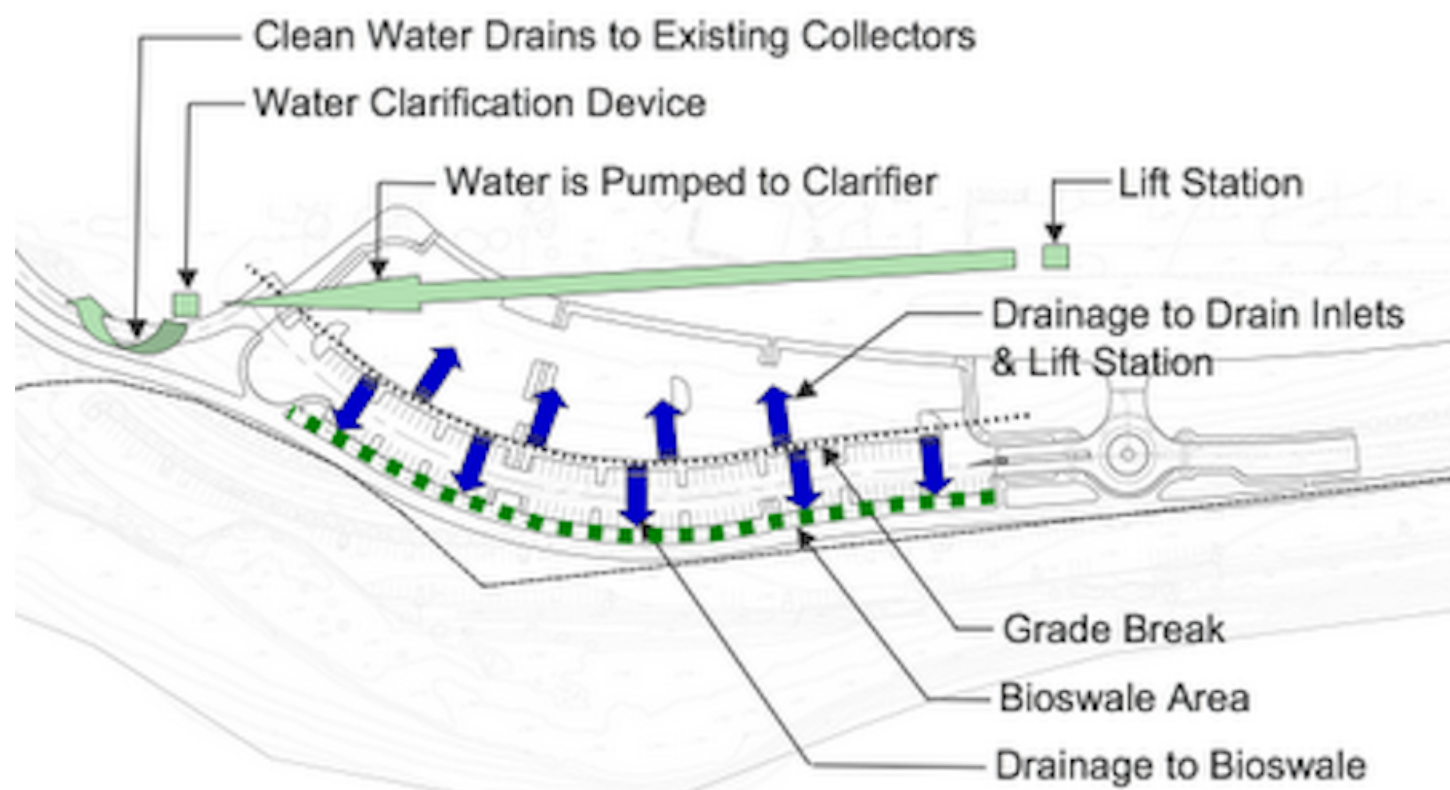


Fig. 4. Surfer's Point Managed Retreat, Ventura, CA. The Surfer's Point property is owned by Ventura County Fairgrounds and located east of the mouth of the Ventura River in the City of Ventura. Phase 1 of the managed retreat involved construction of a cobble berm for back beach shoreline restoration and relocation of the bike path and parking lot 60 feet landward. Top left: original bike path and erosion damage, bottom left: construction of cobble berm, top right: completed bike path Phase 1 construction, bottom right: map of California with Surfer's Point labeled.







Aerial overview of Surfers' Point project site

Phase 2 Planning Area

Ventura Fairgrounds - Seaside Park

Managed Shoreline Retreat
Phase 1

Ventura River mouth and delta

3-10-17 R. Wilborn Virtual Terrain Tours



Surfers' Point Managed Shoreline Retreat Phase 1
Dune response during extreme event, Dec 11, 2015



Surfers' Point Managed Shoreline Retreat Phase 2
Overtopping at during extreme event, Dec 11, 2015



Surfers' Point Managed Shoreline Retreat Phase 2
Bike path, Feb 8, 2017